

**CLAIMS**

1. A shedding apparatus, for use under decks, the apparatus comprising

a low-ledger, with an upper-face and an adjacent upstanding-face, said upstanding-face extending above said upper-face,

a high-ledger, with an upper-face and an adjacent upstanding-face, said upstanding-face extending above said upper-face,

a plurality of sloping-members, each sloping-member with an upper-face, a low-end, a high-end, and with one or more projection-depressions of said upper-face such as one or more partially driven nails, or such as one or more drilled holes,

a plurality of cross-members, each cross-member comprising a middle-portion and two end-portions, each end-portion with an upper-face, the middle-portion with an upper-face, said upper-face of the middle-portion and said upper-faces of the end-portions practically coplanar,

one or more panels having corrugations,

a panel holding means,

said low-ledger and said high-ledger adapted to be attached to a proximate structure, such as a deck structure,

said low-ledger and said high-ledger oriented such that said upstanding-face of said high-ledger faces said upstanding-face of said low-ledger,

said sloping-members disposed normal to said low-ledger, and each substantially extending from said upstanding-face of said low-ledger to said upstanding-face of said high-ledger, said low-end of each sloping-member resting upon said upper-face of said low-ledger, said high-end of each sloping-member resting upon said upper-face of said high-ledger, wherein said sloping-members are positioned at generally uniform intervals along the ledgers,

said cross-members generally parallel with said low-ledger, said middle-portions substantially extending from one sloping member to the next, said end-portions of said cross-members disposed over said upper-faces of said sloping-members, each end-portion proximate one or more said projection-depressions of said sloping-member, wherein said cross-members interface with said projection-depression of said sloping-members, wherein said end-portions of said cross-members are held by said interface with said sloping members, a grid support structure is formed, whereby grid members can be snapped, slid, or set into position, unsnapped, slid, or lifted out of position without requiring tools for fastening or unfastening, whereby the grid can be installed, adjusted, and uninstalled from below itself, whereby the ease of installation and removal is facilitated, and whereby, access to the area above the grid for maintenance and other reasons is greatly facilitated,

wherein the upper-faces of the cross-members are substantially co-planar, said panels resting upon said cross-members, oriented with rise and fall of corrugations normal to said low-ledger, said panels overlapping, wherein a substantially planer shedding surface is formed over the grid, whereby said panels can be set into position, shifted, slid or lifted out of position without requiring tools for fastening or unfastening, whereby the panels can be installed and uninstalled from below, whereby the ease of installation and removal is facilitated, and whereby, access to the area above the panels for maintenance and other reasons is greatly facilitated.

2. The shedding apparatus of claim 1, wherein said low-ledger comprises a 2x2 fastened to a face of a 5/4 board, whereby said low-ledger can be proficiently manufactured from wood and is aesthetically pleasing in a deck environment.

3. The shedding apparatus of claim 1, wherein said high-ledger comprises a 2x2 fastened to a face of a 5/4 board, whereby said high-ledger can be proficiently manufactured from wood and is aesthetically pleasing in a deck environment.

4. The shedding apparatus of claim 1, wherein said sloping-member comprises a 2x2 with one or more said projection-depressions, whereby said sloping-member can be proficiently manufactured from wood and is aesthetically pleasing in a deck environment.

5. The shedding apparatus of claim 1, wherein said projection-depression of said sloping-member is a partially driven nail, or a partially driven staple.

6. The shedding apparatus of claim 1, wherein said end-portion of said cross-member is of diminutive thickness, wherein said upper-surface of said sloping-member and said upper-surface of said cross-member are substantially co-planer, wherein the vertical height of the grid is reduced providing a sleeker profile, whereby the appearance of the grid from outside and below is less obtrusive and is aesthetically pleasing.

7. The shedding apparatus of claim 1, wherein the middle-portion of said cross-member has end-faces, wherein said sloping-members has sides, wherein said interface of said sloping-members with said cross-member includes the disposition of said end-face of said cross-member against said side of said sloping-member, wherein the ledgers have ends, wherein the sloping-members located proximate to the ends of the ledgers are fastened at the high-end to the high-ledger and at the low-end to the low-ledger, whereby said grid is contained, whereby cross-members with end-portions having open-ended slots may be used to create a stable grid, whereby ease of manufacture, installation, and access are facilitated.

8. The shedding apparatus of claim 1, wherein said-cross-member comprises a wood slat with a plastic bracket at each end, whereby said cross-member can be proficiently manufactured from wood and plastic brackets, and is aesthetically pleasing in a deck environment.

9. The plastic bracket of claim 8, wherein said plastic bracket is 1/8" pvc with a hollow, such as a hole or open-ended slot, wherein said hollow of said plastic bracket is fitted about said projection-depression of said sloping member.

10. The shedding apparatus of claim 1, wherein said panel holding means is a panel clip.

11. The shedding apparatus of claim 1, further comprising a spacer, said spacer comprising a wood slat and a fastening means, wherein the spacer is fastened to the upstanding face of the high-ledger, whereby each spacer effectively replaces a cross-member, and whereby said sloping-member is laterally constrained by said spacer, yet said sloping-member can be lifted out and re-set into position without use of tools.

12. The shedding apparatus of claim 1, further comprising flashing at the high-ledger as a panel holding means.

13. The shedding apparatus of claim 1 further comprising a fascia-board or deck beam, onto which the gutter may be attached whereby the gutter is hidden and whereby the low-ledger is alleviated of the weight of the gutter and contents.
14. The shedding apparatus of claim 1 further comprising a gutter and downspout, whereby rain is collected and transported away.
15. The shedding apparatus of claim 1 further comprising a mid-ledger, the mid-ledger having an upper-face and an adjacent upstanding face, the upstanding face having notches, whereby the sloping-member having spans greater than 10 feet can be supported.
16. The shedding apparatus of 1 further comprising endboards, each said endboard comprising a joist hanger and a plate with a face, said joist hanger fastened to said face of said plate, said plate adapted to be fastened to a proximate structure, wherein said low-ledger or said high-ledger sets in said joist hanger, whereby the ledger can be set into and lifted out of said joist hanger without fastening or use of tools.
17. A grid apparatus for supporting panels, the apparatus comprising:
- a low-ledger, with an upper-face and an adjacent vertical-face,
  - a high-ledger, with an upper-face and an adjacent vertical-face,
  - a plurality of sloping-members, each sloping-member with an upper-face, a low-end, a high-end, and with one or more projection-depressions of said upper-face such as one or more partially driven nails, or such as one or more drilled holes,
  - one or more cross-members, each cross-member comprising a middle-portion and two end-portions, each end-portion with an upper-face, the middle-portion with an upper-face, said upper-face of the middle-portion and said upper-faces of the end-portions substantially coplanar,
  - said low-ledger and said high-ledger oriented such that said upstanding-face of said high-ledger substantially faces said upstanding-face of said low-ledger,
  - said sloping-members disposed transverse to said low-ledger, and each substantially extending from said vertical-face of said low-ledger to said vertical-face of said high-ledger,

said low-end of each sloping-member resting upon said upper-face of said low-ledger, said high-end of each sloping-member resting upon said upper-face of said high-ledger, wherein said sloping-members are positioned at generally uniform intervals along the ledgers,

said cross-members generally parallel with said low-ledger, said middle-portions substantially extending from one sloping member to the next, said end-portions of said cross-members disposed over said upper-faces of said sloping-members, each end-portion proximate one or more said projection-depressions of said sloping-member, wherein said cross-members interface with said projection-depression of said sloping-members, wherein said end-portions of said cross-members are held by said interface with said sloping members, wherein a grid support structure is formed, whereby grid members can be snapped, slid, or set into position, unsnapped, slid, or lifted out of position without requiring tools for fastening or unfastening, whereby the grid can be installed, adjusted, and uninstalled from below itself, whereby the ease of installation and removal is facilitated, and whereby, access to the area above the grid for maintenance and other reasons is greatly facilitated,

wherein the upper-faces of the cross-members are substantially co-planar to thereby provide a support surface for panels.

18. A grid support structure comprising:

a first-side supporting means

a second-side supporting means

a plurality of rafter-members, each rafter-member with an upper-face, a first-end, a second-end, and with one or more projection-depressions of said upper-face, each rafter-member substantially extending from said first-side support means to said second-side support means, wherein a number of said rafter-members are positioned at substantially uniform intervals from each other

one or more cross-members, each cross-member comprising a middle-portion and two end-portions, each end-portion with an upper-face, the middle-portion with an upper-face, said cross-members positioned transverse to said rafter-members, said middle-portions of said cross-members substantially extending from one rafter-member to the next, said end-portions of said cross-members disposed over said upper-faces of said rafter-members, each end-portion proximate one or more said projection-depressions of said rafter-member, wherein

said cross-members interface with said projection-depression of said rafter-members, said end-portions of said cross-members are held by said interface with said members, whereby cross-members can be snapped, slid, or set into position, unsnapped, slid, or lifted out of position, w hereby cross-members can be installed, adjusted, and uninstalled from below, whereby the ease of installation and removal of cross-members is facilitated, and whereby, access to the area above the grid for maintenance and other reasons is greatly facilitated.